SECTION V – MULTIFAMILY SERVICE REQUIREMENTS

This section discusses the requirements for establishing electric service to multifamily dwellings. The City of Palo Alto provides this service to buildings that consist of multiple units, such as apartments and condominiums.

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See: **Drawings**, located in the **REFERENCE SECTION**, to refer to the drawings listed below.

1. Blank Commercial Utility - Service Application* Information Package
2. Example of Completed - Commercial Utility Service Application
3. Drawing DT-SS-C-1005 - Concrete Transformer Pad
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9. Drawing DT-SS-U-1026 - Concrete Switch Pad Detail
10. Drawing DT-SS-U-1038 - Concrete Collar Surrounding a Vault
11. Drawing DT-PR-U-1004 - Direct Buried Conduit
12. Drawing SR-MT-E-1012 - Required Minimum Clearances of Meter Sockets
13. Drawing SR-MT-E-1013 - Clearance for Meter Cabinet Enclosures
14. Drawing SR-MT-E-1014 - Meter Socket - Diagram of Connections
15. Drawing SR-XF-E-1020 - Transition Cabinet
16. Drawing SL-SS-C-1021 - Street Light Foundation - 10' to 14'
17. Drawing SL-SS-C-1022 - Street Light Foundation - 20' to 25'
18. Drawing SL-SS-C-1023 - Street Light Foundation - 30'
19. Drawing SL-SS-C-1024 - Street Light Foundation - Pedestal Type
20. EUSERC Acceptability Table

***** The Utility Commercial Service Application is used for Multifamily Service.

I. MULTIFAMILY SERVICE REQUESTS

Please observe the following procedures to ensure electric service by your requested date. The City of Palo Alto will not connect electric service until the customer meets all inspection requirements and pays all necessary fees.

A. PLANNING

1. Initial Planning

a. Before the preliminary project submittal, contact the Electric Engineering Division to discuss your project. An advance engineering fee may be required.

2. Preliminary Submittals

Submit your preliminary project information and site plans to the Development Center at 285 Hamilton Avenue or Utilities Electric Engineering at 1007 Elwell Court for review. Include the following information in each service application:

a. Utility Service Applications

- Utility Service Applications are available through the Development Center.
- Supply as much preliminary information as possible; incomplete Utility Service Applications will delay the service approval process. An Electric Engineering representative will attempt to contact you for any missing information.
- Provide customer contact addresses, email addresses and phone numbers.
- Submit the Utility Service Application no later than the site and design submittals to the Planning Department at the Development Center.

The **REFERENCE SECTION** provides a sample blank Utility Service Application and an example completed Utility Service Application. In order for the City to properly size the transformer, please include inrush data for welding equipment and X-Ray equipment, largest motor locked rotor current, etc.

b. Site and Design Plans should include the following:

- Building layout and location of property lines, proposed parking, and landscaping including existing trees.
- Proposed customer switchgear and other service equipment locations.
- Elevation of multistory buildings close to sidewalks where overhead power lines exist.
- Proposed location for the Utility padmount transformer.

Exclude plumbing, fire protection, mechanical, civil, and structural drawings unless used for electrical items.

Note: At this time, Electric Engineering does field checks and reviews the preliminary submittals. It then returns comments to the customer requesting any necessary modifications via the Development Center.

3. Other Utilities

This manual discusses only those requirements applicable to the Electric Utility for electric service requests.

a. The customer's responsibilities also include:

- Contacting other utilities such as telephone and cable television companies, and the Water, Gas, and Wastewater Department of the City of Palo Alto.
- Coordinating all utility service installations early in the project to avoid possible delays.

4. Temporary Service

a. If you require temporary service, refer to **SECTION I – TEMPORARY SERVICE REQUIREMENTS** for the installation requirements.

B. FINAL SUBMITTALS

Electric Engineering accepts the final submittal when the customer is ready to apply for a Building Department permit. Include all of the required, updated project information below and any relevant electrical drawings.

1. Final Submittal Information

All conditions of approval from preliminary planning submittals must be met.

a. Updated Utility Service Application:

- Please include complete and accurate information. Incomplete Utility Service Applications will slow the approval process and may delay special equipment orders.

b. Updated site plan:

- Incorporate all of the previous comments from Electric Engineering to the preliminary design.
- Also include information on any landscaping, fencing, etc. that will be located near Utility equipment.

c. Service equipment location:

- Include drawings to show both the location and access to the service equipment.

d. Electrical one-line drawings:

- Provide the type, ratings and settings of the main circuit breaker.
- Show any equipment that uses high levels of harmonic current such as variable speed drives, process equipment, workstations, etc.
- Show any emergency or standby generators.

e. Applicable civil drawings regarding substructures.

- Show vault/box orientation and conduit entrance location details.
- Show duct beam cross section

2. Switchboard Submittals

Send switchboard drawings to the Electric Metering Department, 3201 East Bayshore Road, Palo Alto 94303.

a. The customer must submit switchboard information during construction, before the fabrication of the switchboard.

- See: **Section G - Service Energizing** for further information.

C. APPROVALS

1. Approval Process

a. Electric Engineering will perform a preliminary plan review to determine if an Advance Engineering Fee is required. If the Advance Engineering Fee is required, the customer will be billed. Engineering will not proceed with its work until the Advance Engineering Fee has been paid.

b. Electric Engineering reviews the final submittals, and then does the following:

- Issues specific comments and requirements to the applicant on the proposed service.
- Approves the site plan incorporating appropriate comments, notes, and changes and returns it to the applicant.
- Estimates the applicable service connection fees to be paid.
- Requests resubmittal if the plans are unacceptable.

Note: The corrected drawings should be kept at the job site and made available to the Electrical Underground Inspector upon request.

2. Required Approvals

a. Complete and obtain approval from the Electrical Underground Inspector for all substructure work before trenching or excavation starts.

- Primary conduits are subject to mandrel testing before acceptance.

b. Pads and vaults must be approved before the City pulls the cable and sets the switch and transformer.

- The City will schedule cable installation and the setting of the transformer and switch approximately two weeks

after approving the substructures.

c. For additional information on specific approval requirements, please refer to **Section V.II - Multifamily Service Specifications**.

D. SERVICE CONNECTION FEES

1. Charges

a. The service connection fees are based on Utility Rate Schedule E-15.

b. The Utility estimates applicable fees and charges based upon the installation costs.

c. Service work scheduled during non-working hours at the customer's convenience or to avoid impacting electrical service to other customers will be billed at the double-time rate.

- If the City schedules the work during non-working hours for the City's convenience, there is no charge for the overtime differential costs.

d. The connection fee for new developments (single family, multi-family, or commercial/industrial inclusive) consisting of 30 (thirty) units or more will include the estimate of the cost to furnish all electric meters with CPAU approved Automated Meter Reading Encoder Receiver Transmitter's.

2. Payment

Pay all fees before starting construction to avoid delays in service.

Note: The typical lead time needed to engineer and install City electric facilities is 30 to 45 days after **all** fees have been paid.

E. CONSTRUCTION

1. Prerequisites

Construction may proceed once you receive approval from Electric Engineering and a building permit from the Building Department.

2. Switchboard Submittals

a. Before fabrication of the switchboard, the customer must submit the switchboard information to the Electric Engineering Division at 1007 Elwell Court, Palo Alto, CA 94303.

b. All service entrance and metering compartment designs must be approved before installation.

c. If the service is 400 amps or larger, submit factory drawings for approval. Otherwise, catalog cut sheets are acceptable.

d. Submit one set of the manufacturer's switchboard drawings to the Electric Metering Department before fabrication of the switchboard.

e. The City requires conformance to all EUSERC standards for switchgear. See the EUSERC acceptability table in the **REFERENCE SECTION** for details.

Note: Some switchgear equipment allowed by other utility companies (such as PG&E) may be unacceptable in the City of Palo Alto.

3. Utility Contacts and Information

Discuss any questions regarding your electrical service that arise during construction with Electric Engineering.

- For new underground service, contact the Electrical Underground Inspector at (650) 496-5934.
- For new overhead service, contact the Electric Engineering Estimator at (650) 566-4500.
- For information regarding pads, vaults, ducts, and bus ducts, contact the Electrical Underground Inspector.
- For information regarding meters, potential transformers, and current transformers, contact the Electric Metering Department at (650) 496-6978.
- For information regarding the selection of transformers, contact the Electric Engineering Estimator at (650) 566-4500.

F. INSPECTION

1. Underground Service Inspection

a. All new underground electric services require inspection and approval from both the Building Department and the Electrical Underground Inspector. The Building Department Inspector must inspect and approve the meter panel before the meter is set. The Underground Inspector must inspect the electrical conduit in the trench prior to backfilling and the cables prior to energizing.

b. Contact the following to set up inspection:

- For all work on the Utility side of the service point, contact the Electrical Underground Inspector at (650) 496-5934. This includes underground service conduits installed before backfilling, as well as service lateral conductors.
- For all electrical work on the customer side of the service point, contact the Building Department Inspector at (650) 329-2496. This includes all service equipment and connections beyond the meter.

G. SERVICE ENERGIZING

1. Service Conditions

The City of Palo Alto energizes the service and sets the meter(s) only when the customer meets the following conditions:

- All fees are paid in full.
- The customer has complied with all of the requirements in this section.
- Utilities Customer Service issues a meter "set tag" which permits the Utility to energize the service.
- All easements required by the City have been granted.

2. Energizing Time

Once all of the conditions above are met, the City typically energizes multifamily electric service in two to five working days.

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II. MULTIFAMILY SERVICE SPECIFICATIONS

A. GENERAL

1. Service Conditions

The City of Palo Alto defines multiple family dwellings as one or more buildings located within the property boundaries, which consist of multiple units.

a. The Electric Utility reserves the right to install City equipment, including primary and secondary distribution cables and transformers, within the property boundaries.

b. Each building on the property requires one service lateral to deliver individually metered service to each apartment or condominium.

c. Duplexes and cottages usually receive residential, single family service.

- Consult the Utility when planning for this service.

2. Services Available

a. The standard service voltages shown below are available to multiple family dwellings.

Single-Phase Service

- 120/240 volt, 3-wire service.
- The maximum transformer size is 75 kVA.

Three-Phase Service

- 120/208 volt, 4-wire service.
- The transformer size is limited to 75 to 750 kVA.

Larger facilities requiring more than a 750 kVA transformer receive 277/480 volt service or service at the available primary voltage.

b. For additional information on service voltages, refer to Rule and Regulation #3.

3. General Load Limitations for Single-Phase Service

Single-phase service is provided under the following conditions:

a. Where the size of any single motor does not exceed 7-1/2 horsepower.

b. In locations where the utility maintains a 120/208 Volt system, the service supply is limited to 200 Amperes.

(Loads in excess receive three-phase, 4-wire service).

4. General Load Limitations for Three-Phase Service

Three-phase secondary service supplies a maximum of 480 volts. **Table V-1** below indicates the range of load requirements for the service.

Normal Voltage	Minimum Load Requirements	Maximum Load
208Y/120	Demand load justifies a 75 kVA transformer	750 kVA
480Y/277	Demand load justifies a 112 kVA transformer	2,500 kVA (See below)

TABLE V-1: Three-Phase Service Load Requirements

Note: If the maximum demand exceeds 2500 kVA, the customer receives electric service at the available primary voltage of 12,470 volts and the customer must provide the primary switchgear and transformers.

The following conditions for service apply:

a. A padmounted service transformer is required unless otherwise approved by the Utility.

- The customer must provide adequate space for installation, or reimburse the Utility for additional costs to locate the transformer outside the property boundaries.
- The customer must provide adequate space for transformer installation or arrange to receive service at primary voltage at customer expense.

5. Service Point

The Utility determines the service point for the customer.

- For underground services, the service point will be a designated City of Palo Alto electric splice box, transformer housing, or pole.

6. Underground Services

All services over 400 amps or located in underground districts must be underground.

7. Overhead Services

a. New or upgraded services up to 400 amps may be overhead at the Utility's discretion, provided the service is not in an underground district.

b. For 400 amp overhead services, the Utility may require an easement for a padmount transformer.

c. Service drops may not exceed 100 feet (80 feet for 400 Amp services) without permission from the Utility.

8. Distribution Lines and Service Extensions

Coordinate projects requiring the extension of high-voltage distribution lines with the Electric Utility. An advance engineering fee will be required.

9. Electric Underground Facilities

a. For information on the location of existing underground facilities, call the Underground Service Alert (USA) at (800) 227-2600.

b. If you are digging near a City electric underground facility and need further direction, contact a representative at (650) 496-5934 to meet you in the field.

c. You must obtain a street-opening permit from the Department of Public Works before digging in a street right-of-way. This includes sidewalks, driveways, and planter strips.

10. Connections to Electric Utility Secondary

The City of Palo Alto Electric Operations Department makes all connections to the Utility's electric distribution system.

11. Easements

An easement may be required wherever facilities are installed for City use. The easement must be recorded or a signed letter of intent received by the Utility before the service will be energized. Where required, the nominal easements are as follows:

- Cable in conduit – 5 ft. wide for total length
- Transformer up to 500 kVA – 10 ft. wide x 10 ft. long [3 ft. clear space on three sides and 8 ft. clear space in front for operation]
- Transformer larger than 500 kVA – 13 ft. wide x 13 ft. long [3 ft. clear space on three sides and 8 ft. clear space in front for operation]
- Padmounted Switch – 12 ft. wide x 10 ft. long [3 ft. clear space on three sides and 8 ft. clear space in front for operation]
- Padmount Load Break Junction – 5 ft. wide x 5 ft. long
- Primary Vault – 10 ft. wide by 10 ft. long
- Primary Pull Box – 6 ft. wide by 5 ft. long
- Secondary Pull Box – 5 ft. wide by 5 ft. long

The exact easement requirements may vary depending on the installation and will be determined by City of Palo Alto Electrical Engineering Division.

B. CONDUITS

Note: All electrical substructures from the service point to the switchgear must be installed by the customer. See: Utility Rule and Regulation #18-A.4.

1. Secondary Conduit Installation

a. The customer (or contractor) is responsible for installing conduits from the service point to the meter.

b. Use only Schedule 40 or DB-120 PVC conduit for below ground installations. Use galvanized rigid steel conduit for above ground installations.

c. No individual Conduit bend shall exceed 90 degrees.

d. No more than three 90 degree bends (270 degrees total) are allowed between pull boxes in a conduit run.

e. The minimum cover requirement for service conduits is 24 inches in non-traffic areas and 30 inches in traffic areas, unless otherwise approved by the Electric Engineering Division.

Table III-B shows the acceptable conduit sizes and minimum bending radius for secondary conduit installations.

Conduit Size	Minimum Radius
2 inches	24 inches
3 inches	36 inches
4 inches	36 inches
5 inches	*60 inches
Risers	36 inches

Table III-B: Acceptable Conduit Sizes and Minimum Bending Radius

2. Sizing Secondary Conduits

a. Conduits must be sized per City of Palo Alto Standard Drawing DT-SE-U-1032 from the service point to the meter.

b. Customer has the option to install either aluminum or copper conductors.

c. For requirements regarding secondary conduit installation into vaults, refer to **Section F. – Vaults and Switch pads.**

3. Secondary Conduit Approval

a. Conduit installation must be approved by the Electric Underground Inspector before backfilling.

b. All conduits, new or existing, shall be mandrel tested prior to installation of new service conductors.

4. Primary Conduit Installation

a. Install all primary conduits according to the City of Palo Alto Standard Drawing DT-SS-U-1003 in the **REFERENCE SECTION**.

b. Installing primary conduits to the transformer:

- Use two 4-inch primary conduits from an existing vault or junction box, or a new switch pad, to the new transformer pad.

c. Installing primary conduits to the switch pad:

- The Utility will determine the conduit requirements between existing vaults and new switch pads.

d. Primary conduits must be concrete encased unless approved otherwise by Electric Engineering.

- Install at a minimum depth of 42 inches from the top of the encasement. See drawing DT-SS-U-1003 in the **REFERENCE SECTION**.

e. Do not place more than two 90-degree bends in a primary conduit run.

f. Conduit runs over 500 feet in length require additional pull boxes.

g. Use only 4 inch and 5 inch conduits for the primary conduit.

h. Additional requirements may be established during the project review.

5. Primary Conduit Testing and Inspection

a. Primary conduits and trenches must be inspected and

approved by the Utility before the backfill.

b. Primary conduits must be mandrel tested before approval.

c. Install a 3/8 inch polypropylene pull line in all primary ducts.

6. Fiber Optic Conduits

Utilities recommends that when installing conduits for secondary or primary facilities, the customer install a separate 2" conduit for provision of fiber optic, or other communications, service. CPAU can assist with determining the best locations for these facilities.

C. JUNCTION BOXES

1. Installation

a. Install a junction box at the base of riser poles to allow for future riser pole replacement.

b. Conduit runs over 500 feet in length require additional pull boxes.

c. Junction boxes used for commercial services must meet the requirements of Drawing DT-SS-r.

d. Refer to the **REFERENCE SECTION** for additional information on junction box installation.

D. TRANSFORMER PADS AND TRANSITION CABINETS

1. Transformer Pads

a. The Utility determines the appropriate size and type of transformer for each facility.

b. Install the transformer pad and guard posts according to Drawing DT-SS-C-1005 in the **REFERENCE SECTION**.

c. The customer must maintain the required vertical and horizontal clearances for the transformer as specified by the Utility.

The following horizontal clearances are required:

- Pad Mounted equipment shall have a minimum of 8 feet in front of the equipment doors.
- Minimum of 3 feet clearance from the edge of the concrete pad is required around the non-operable sides of the pad mounted equipment.

The following vertical clearances are required:

- 20 feet minimum for single phase pad mounted transformers.
- 30 feet minimum for three phase pad mounted transformers.

Note: The Electrical Underground Inspector must approve the transformer pads/substructure.

2. Transition Cabinets

a. The customer is required to provide a transition cabinet as the interconnection point between the service lateral and the service entrance conductors if the secondary current exceeds 1600 amps.

- Exception: A transition cabinet is not required if the customer installs busway from the main switchgear to the Utility's padmount transformer. In this case, the customer will own and maintain the bus duct. The City will be responsible only up to the transformer secondary terminals.

b. Size the cabinet according to the main disconnect rating.

- Submit the transition cabinet design to the Electric Engineering Division for approval.

c. For services supplied by 150 kVA to 750 kVA padmount transformers:

- Provide four, 4 inch secondary conduits between the Utility side of the transition cabinet and the transformer secondary compartment.
- Cable-in-duct or busway may be used between the transition cabinet and the switchgear.

d. For services provided by 1000 kVA and larger transformers:

- Provide suitable busway between the transition cabinet and the secondary compartment of the transformer.

e. A recommended transition cabinet design is included in drawing SR-XF-E-1020 in the **REFERENCE SECTION**. Drawings showing the use of the transition cabinet are also included.

E. BUSWAY CONNECTIONS

1. Transformers

a. All electric services using padmount transformers of 1000 kVA or greater capacity must have a busway connection to the transformer.

b. Use 500 kcmil, 600 – V, extra-flexible, copper conductor for the connections between the transformer secondary terminals and the busway conductors. The customer must provide the busway, connectors, and cables.

- Busway must comply with the California Electrical Code and be U.L. listed.
- Connectors shall be crimped and selected as part of a UL approved assembly for the cable.

c. The Utility will designate a specific transformer to use at the customer's facility.

- For design of the busway, the customer shall contact Electric Engineering to schedule measurement of the transformer. The customer is responsible for cutting the transformer case to accept the busway connection.

d. The customer will own and maintain all busway from the main switchgear or transition cabinet to the Utility's transformer.

2. Inspection and Approval

a. Provide detailed drawings of the proposed busway to Electric Engineering.

- The Utility must review and approve the drawings before

installation of the busway.

b. Submit the busway pattern to the Utility for approval.

c. The City Building Inspector must inspect and approve the busway installation between the customer's switchgear and the transition cabinet.

d. The Underground Electrical Inspector must inspect and approve the busway installation from the transition cabinet to the transformer.

e. A preferred busway connection design for use within the transformer secondary compartment is shown in drawing SR-XF-E-1020 in the **REFERENCE SECTION**.

F. VAULTS AND SWITCH PADS

1. Permits

Obtain a Street Opening Permit from the Department of Public Works before digging in a street right-of-way (this includes sidewalks, driveways, and planter strips).

2. Vault Requirements

a. When installing conduits into an energized vault, always core drill from the outside. City's Underground Electrical Inspector must be present during the core drilling. Contact the Electrical Underground Inspector at (650) 496-5934.

b. The Utility will designate the proper location for core drilling into the vault.

c. New vaults must meet Utility standards.

- The Utility will specify the vault size and top section requirements.
- Consult the Utility for vault specifications and standards.
- Some "pre-approved" designs are available.

3. Switch Pad Requirements

The customer must provide the switch pad and box for the installation of a padmount switch. See drawing DT-SS-U-1026 in

the **REFERENCE SECTION** for requirements.

G. CONDUCTORS

Note: The City of Palo Alto Electric Operations Department makes all connections and terminations to the City Electric Utility distribution system. See: Utility Rule and Regulation #18-C.

1. Secondary and Service Lateral Conductors

a. The customer (or contractor) is responsible for installing all underground secondary service conductors and providing crimp lugs.

b. All secondary conductors must be rated 600 volts and meet U.L. standards for conduit installation.

c. Service lateral may not exceed 100 feet unless approved by Utilities.

d. Size service entrance conductors per drawing DT-SE-U-1032. A full size neutral is required.

e. The Utility allows only one service lateral per parcel.

- For exceptions see: Utility Rule and Regulation 20.C.

f. All crimp lugs must be U.L. approved and provided by the

- Use an oxidation inhibitor on aluminum conductors.

g. The Utility takes responsibility for maintenance of the service lateral conductors after acceptance by the Utility. The customer is responsible for maintaining conduits and boxes. If the conduits are deteriorated to the extent that the conductors cannot be removed or reinstalled, then it shall be the customer's responsibility to repair or replace the conduits.

2. Primary Conductors

a. Only the Utility installs and terminates primary conductors.

b. The Utility will bill the cost of furnishing and installing primary conductors.

- See: City of Palo Alto Rate Schedule E-15 in the

REFERENCE SECTION.

4. Service Conductors within Buildings

The service conductors must terminate at a disconnect switch immediately after entering the building. Installations must comply with the California Electrical Code section 230-70 concerning the location of the disconnect switch and section 230-6 for the definition of conductors considered outside a building.

H. METERING AND SERVICE EQUIPMENT

1. Metering Locations

Note: All meter and switchgear must meet both the EUSERC requirements and the City of Palo Alto's standards for meter installations. See the EUSERC acceptability table in the **REFERENCE SECTION**.

a. All meter locations must be approved by Utilities Electric Engineering.

- Master metering is not permitted.

b. Group all meters together at one location at each building. For multi-meter installation, refer to EUSERC drawings.

- See: **Meter Sockets**

c. All service equipment must be located above grade level unless otherwise approved by Electric Engineering.

d. Maintain 18 inches of horizontal separation from the nearest edge of the electric meter panel to the gas riser and 6 inches from the gas houseline. See drawing SR-CN-0-1009 in the **REFERENCE SECTION**.

e. Provide a level working space 30 inches wide and 36 inches deep in front of each meter.

f. Meters must be accessible to the Utility for meter reading and maintenance.

- Locating meters in locked rooms, cabinets, or fenced enclosures is permitted only after approval by the Utility.

- The customer is responsible for having the lock keyed for City use.

g. Do not install meters or metering equipment in ventilator shafts, closets, or lavatories.

h. Do not install meters in or above stairways, doorways, windows, sinks, wash trays, or driveways.

i. Do not install electric meters above gas meters or in any other hazardous location.

j. Do not install meters where they could be obstructed by doors or swinging windows.

k. For more information on metering installations, refer to the California Electrical Code and The State of California Electric Safety Orders.

- See drawings in the **REFERENCE SECTION** for illustrations of approved meter installations.

2. Meter Height

a. The center of the electric meter socket(s) must be 48 to 75 inches above final grade unless otherwise approved by Electric Engineering.

b. When the Service Equipment is installed in a location susceptible to damage by vehicles (i.e. in or along a driveway, etc.) the meter and equipment shall be protected by guard posts to prevent contact.

c. For multi-meter installations refer to the applicable EUSERC drawings.

3. Meter Sockets

a. Install the meter socket in a true vertical plane.

b. Seal any unused meter socket locations with internally removable covers.

c. Do not use die-cast meter sockets as a wiring gutter for more than 2 meters.

d. To find the meter socket requirements for a specific service

voltage, see the **REFERENCE SECTION**.

f. Ring-type sockets are required.

4. Meter Cabinets and Enclosures

a. Design the cabinet so that the roof, doors, and supports do not interfere with the meter installation.

b. Do not use shallow cabinets which have holes cut in the door for the meter to protrude through.

c. The clearance between the sealing flanges of the meter socket and the inside of the closed cabinet door must be at least 9 inches. See drawing SR-MT-E-1013 in the **REFERENCE SECTION**.

d. Hinged doors must not exceed 48 inches in width.

- Provide hinged doors with a device to hold them open safely.

e. Fit doors properly with adequate hinges and latches to insure positive opening and closing.

f. Construct cabinets exposed to the weather for rain tightness and of weather resistant materials.

- Flash and seal all top openings where conduits enter and leave.

5. Meter Panels

a. Meter panels must meet the EUSERC requirements as accepted by the City of Palo Alto.

- See the EUSERC acceptability table in the **REFERENCE SECTION**.

b. The Utility will install current transformers and wire the meter socket for services over 200 amps or 480Y/277 volt services.

6. Service Disconnect

a. Use only a U.L. approved service disconnect.

b. Install the service disconnect on the load side of the metering

section of the switchboard.

c. In locations where more than 6 meters are installed, provide a main disconnect on the Utility side of the meters.

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